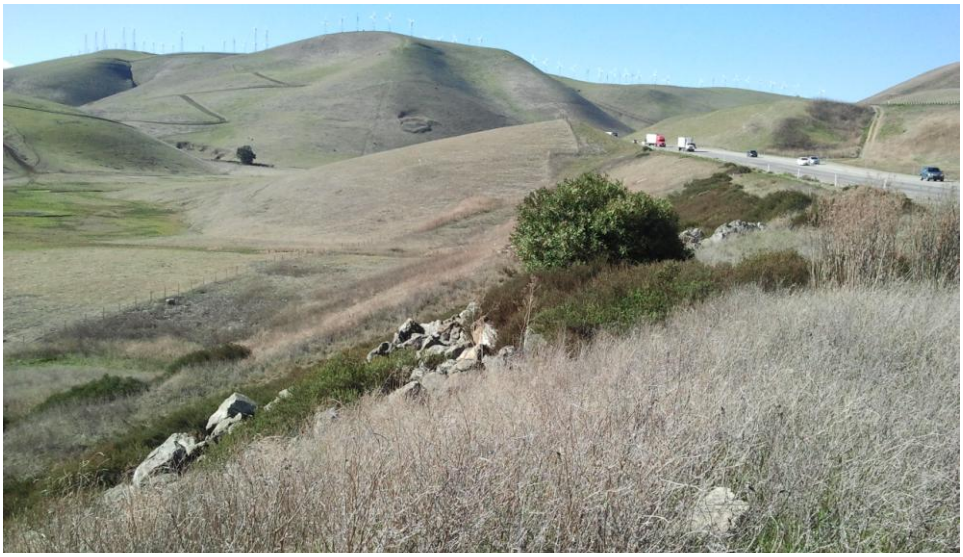
Interstate 580 Storm Damage Repair

Alameda County, East of Livermore, near Stone Cut Railroad Underpass
04-ALA-580-PM R3.9/R4.2
Project ID: 0412000008 (04-2G850)

Initial Study with
Proposed Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

August 2013

Caltrans

General Information About This Document

What's in this Document:

The California Department of Transportation (Caltrans) as lead agency under the California Environmental Quality Act, has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Alameda County, California. The document tells you why the project is being proposed, and how the existing environment that could be affected by the project, potential impacts from the project, and proposed avoidance, minimization, and/or mitigation measures. Technical studies or memos are bound separately.

What you should do:

Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at:

Caltrans District 4 Environmental office at: 111 Grand Ave, Oakland, CA 94612

Livermore Public Library (Civic Center): 1188 South Livermore Ave. Livermore, CA 94550
See web address for hours of operation or directions: http://www.cityoflivermore.net/citygov/lib/

The document can also be accessed electronically at the following Caltrans District 4 website: http://www.dot.ca.gov/dist4/envdocs.htm

We'd like to hear what you think. If you have any comments regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments or request a Public Hearing via postal mail to:

Kelly Hobbs, Senior Environmental Planner
Sierra Pacific Environmental Analysis Branch
California Department of Transportation
855 M Street, Suite 200
Fresno, CA 93721

Submit comments via email to: Kelly.Hobbs@dot.ca.gov

Submit comments by the deadline: September 12, 2013 (circulation is August 12, 2013 to September 12, 2013)

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, assigned by the Federal Highway Administration (FHWA), may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Kelly Hobbs, Environmental division, 855 M Street, Suite 200, Fresno, CA 93721, (559) 445-5286 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.

CEQA Environmental Checklist

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	Alameda County, Interstate 580, Storm Damage Project-Repair Slip-out
Lead Agency and address of District 4 office:	California Department of Transportation (Caltrans) 111 Grand Ave, Oakland, CA 94612
Caltrans contact person and telephone number:	Kelly Hobbs, Senior Environmental Planner Sierra Pacific Environmental Analysis Branch, Caltrans District 6 Office 855 M. Street, Suite 200, Fresno, CA 93721 (559) 445-5286 Kelly.J.Hobbs@dot.ca.gov
Project Location:	Eastbound Interstate 580, Alameda County, near Livermore, at Stone Cut Underpass
General Plan description:	Located at the mouth of a primary natural pass, Interstate 580 traverses Castro Valley. The I-580 corridor provides the regional access between the Tri-Valley communities of Dublin, San Ramon, Danville, Pleasanton, and Livermore, as well as the Central Valley, and the East Bay communities of Hayward, San Leandro, and Oakland
Zoning:	Transportation corridor in unincorporated Alameda County
Description of project:	The major elements of the project include: install a retaining wall (600 feet long and 30 feet in depth); repair/modify existing drainage facilities including two cross culverts (18” pipes) across eastbound I-580, two down drains on the south side slope, dikes, and ditches associated with the roadway reconstruction; widen the outside shoulder by 4.5 feet and widen the inside shoulder by 2 feet; reconstruct the highway pavement within the project limits; install Metal Beam Guard Railing.
Surrounding land uses and setting:	The project is in the highway (State) right-of-way on undeveloped rolling hillside of grassland, adjacent to a railroad crossing Interstate 580 eastbound lanes. Wind energy wind mills cover adjacent hills.
Other public agencies whose approval is required:	U.S. Fish and Wildlife Service (Sacramento Office) California Department of Fish and Wildlife (Bay–Delta Region Office) United States Army Corps of Engineer s(San Francisco Office) Regional Water Quality Control Board Union Pacific Railroad

Note: A Categorical Exclusion is expected to be signed for NEPA compliance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page X for additional information. Any boxes *not* checked represent issues that were considered as part of the scoping and environmental analysis for the project, but for which no adverse impacts were identified. Regarding boxes not checked, no further discussion of these issues is in this document.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☒	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	☒	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☐	Noise
☐	Paleontology	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation/Traffic	☐	Utilities/Service Systems
☐	Mandatory Findings of Significance				

DETERMINATION:

On the basis of this initial evaluation, check one of the boxes below:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because, although a 2081 permit is required, mitigation will compensate for any impacts, therefore A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

Signature: Kelly Hobbs	**Date:** 6/27/2013
Senior Environmental Planner, Sierra Pacific Environmental Analysis Branch	
Printed Name: Kelly Hobbs	

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to repair the storm damaged embankment, pavement and drainage system along eastbound Interstate 580, at approximately 0.1 mile west of Stone Cut Underpass (PM R4.0), east of the city of Livermore, in Alameda County.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This Mitigated Negative Declaration is subject to change based on comments received from interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on: land use, coastal zone, Wild & Scenic Rivers, parks and recreational facilities, pedestrian and bicycle facilities, growth, farmlands/timberlands, businesses, cultural resources, community character, paleontology, air quality, noise and vibration. In addition, the proposed project would have no significant effect on: utilities, emergency services, traffic and transportation, visual/aesthetics, hydrology/floodplain, water quality/storm water runoff, geology/soils/seismic/topography, hazardous waste/materials, climate change. In addition, the proposed project would have no significantly adverse effect on California tiger salamander because the following mitigation measures would reduce potential effects to insignificance: In accordance with the California Endangered Species Act, California tiger salamander habitat impacted by the project would be mitigated by following the California Department of Fish & Wildlife issued 2081 permit conditions and the 0.13 acre of permanent impacts to habitat would be mitigated at an offsite mitigation source at a 3:1 ratio (0.39 acre). Temporary impacts to habitat would be mitigated at a 1.1:1 ratio. A 1:1 ratio would be restored onsite and the remaining would be added to the purchase at the offsite mitigation source.

Kelly Hobbs
Senior Environmental Planner
California Department of Transportation

6/27/2013
Date

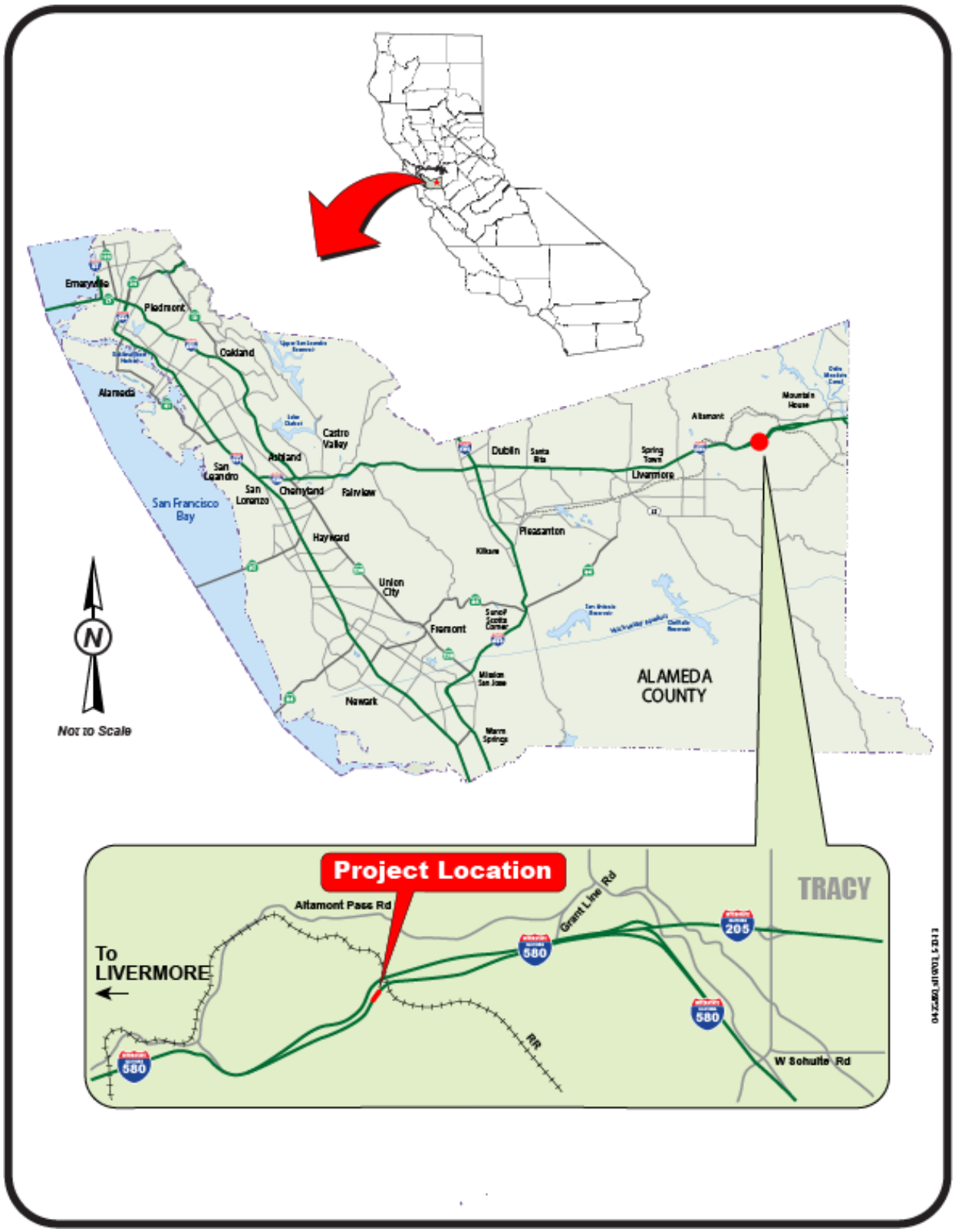


Figure 1-1 Project Vicinity Map

Figure 1-2 Project Location Map

California Environmental Quality Act Checklist

CEQA Environmental Checklist

04-ALA-580	R3.9/R4.2	04-2G850_
Dist.-Co.-Rte.	P.M/P.M.	E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA—not NEPA—impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
II. AGRICULTURE AND FOREST RESOURCES:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	☐	☐	☐	☒
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
California Department of Fish and Wildlife 2081 permit required and offsite compensatory mitigation required				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
Nationwide 404 permit required for temporary impacts				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS: Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	An assessment of the greenhouse gas emissions and climate change is included in Appendix C of this environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project.			
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
Soils contaminated with Aerially Deposited lead may require transport off-site, further information below.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Additional Explanations for Questions in the above Checklist
where something other than No Impact was checked

IV. Biological Resources (checklist questions a and c)

The below discussion covers Wetlands and Other Waters, along with Threatened and Endangered Species since these are the resources that triggered a response other than No Impact.

Affected Environment

The project sits on the south side of Altamont Pass within rolling hills and grassland habitat. Elevation in this area ranges from 740 to 1,000 feet above sea level. Mountain House Creek borders the south side of Interstate 580 south of the project area and flows to the east, toward the Central Valley. Mountain House Creek confluences with the San Joaquin River whereas the Arroyo Seco Creek confluences with Alameda Creek and flows into the San Francisco Bay.

A Natural Environment Study (June 2013) was prepared for this project. For the preparation of this report, studies were conducted to evaluate the potential presence of special-status wildlife and plant species, wetland and other waters of the U.S. and other sensitive biological resources in and around the project.

The biological study area was defined as the project impact area—the area to be directly affected—plus adjacent areas that may be indirectly affected by the proposed project. The biological study area is within the existing Caltrans right-of-way. The surrounding landscape primaritly consists of agricultural, grazing land, and often includes utility facilities. A series of windmills, are located south and east of the project location. The biological study area encompasses 7.4 acres. A combination of database searches, literature review, and botanical surveys, and wetland delineation was conducted.

A variety of habitats are present and intermixed throughout the study area that do support a number of common wildlife species.

Threatened and Endangered Species

The Federally and State-listed Species that could be present in the study area include:

California red-legged frog (*Rana draytonii*) – Federal Threatened, State Species of Special Concern. The frogs predominately inhabit permanent water sources such as streams, lakes, marshes, natural and manmade ponds, as well as drainages in valley bottoms and foothills. The closest designated critical habitat is adjacent to the study area, bordering the right of way. Based on the result of the habitat survey conducted, suitable breeding habitat for the California red-legged frog was not identified within the study area. However, the survey did identify suitable breeding habitat to the east of the study area and, considered that, determined that the biological study area would provide suitable upland habitat for this species. No protocol level surveys have been conducted for this species. Presence has been assumed.

California tiger salamander (*Ambystoma californiense*) – Federal Threatened, State Candidate Endangered. California tiger salamander inhabit lowland grasslands, oak savannah, and mixed woodland habitats, and require vernal pools, seasonal ponds, or semi-permanent calm waters that pond water for at least 3 to 4 months at a time for breeding and larval maturation, and adjacent upland habitat with small mammal burrows. The salamanders begin migrating to breeding sites after the onsite of winter rains, and have been documented traveling up to 1.3 miles from breeding sites. The habitat survey conducted did not identify suitable breeding habitat for the California tiger salamander, but did find such habitat nearby and determined that the study area offers suitable upland habitat for this species. No protocol-level surveys have been conducted for this species. Presence has been assumed.

Within the Biological Study Area, two culverts provide partial passage below the eastbound lanes between the central median and the grasslands south of the biological study area. Although these culverts do not provide direct connectivity across I-580, it may facilitate north-south migratory and dispersal movement in the vicinity, if California tiger salamanders are able to successfully cross the westbound lane, north-south migratory and dispersal movement could occur through the median between grasslands to the north and south.

The study area does not overlap with designated critical habitat for California tiger salamander. The closest critical habitat unit is approximately 6 miles west.

San Joaquin kit fox (*Vulpes macrotis mutica*) – Federal Endangered, State Threatened. This species is found in the southern half of California but can range as far north as Contra Costa County. They prefer habitat consisting of annual grasslands or open grassy portions of vegetation with mixed scrub and small brush. Cover is provided by dens which they dig out in open level areas with loose textured sandy and loamy soils. There is no designated critical habitat for San Joaquin kit fox in the study area or within 10 miles. No dens were observed during surveys within the study area, but it does not contain suitable denning habitat. Based on the results of the surveys, it is not anticipated that the San Joaquin kit foxes would potentially utilize habitat within the study area nor be affected by the proposed project.

Large flowered fiddleneck (*Amsinkia grandiflora*) – Federal Endangered, State Endangered, CNPS 1B.1 The large-flowered fiddleneck is an annual herb in the borage family which grows up to 2 feet tall and blooms March to May. It has bright, red-orange shaped flowers arranged in a fiddleneck-shaped inflorescence and has the potential to occur within the vicinity of the action area.

<u>Special-Status and Locally Rare Species that could be present in the study area include:</u>

American badger (*Taxidea taxus*) – California Species of Special Concern. Numerous occurrences have been recorded within a 10 mile radius of the biological study area. Suitable habitat for the species is present within and near the study area, and there are multiple occurrences within the vicinity, moderate potential exists for the American badger to occur within the biological study area. The surrounding grasslands and presence of mammal burrows indicate suitable habitat for this species.

Loggerhead shrike (*Lanius ludovicianus*) – California Species of Special Concern. The loggerhead shrike a resident of lowlands in California, and a migrant in the adjacent foothills. It is found in grasslands, valley foothill

hardwood, valley foothill hardwood-conifer, and valley foothill riparian habitats, preferring plant communities with open canopies. It nests in shrubs and trees with thick or thorny characteristics. It may also be found in croplands, but is rare in urban areas. Loggerhead shrikes occur within the 10-mile radius of the biological study area. Most occurrences are located southeast of the study area. Grasslands within the area provide suitable foraging habitat for loggerhead shrikes, but no suitable breeding habitat is present.

Tricolored blackbird (*Agelaius tricolor*) – California Species of Special Concern The tricolored blackbird is highly colonial and most numerous in the vicinity of the Central Valley. It is largely endemic to California and requires open water, protected nesting substrate, and foraging areas with insect prey within a few miles of the colony. Nesting occurs from March through August. They nest near open water and foraging areas in thorny or spiny vegetation. Tricolored blackbirds were not observed, however, suitable foraging habitat for the tricolored blackbird is present within and adjacent to the biological study area.

Jurisdicitonal Wetland Delineation

A wetland delineation was conducted on April 2, 2013 to determine whether potential wetlands and other waters of the U.S. exist within the study area. Wetlands, as defined by United States Army Corps of Engineers, must meet criteria for hydrology, hydric soils, and hydrophytic vegetation. These three factors were evaluated; including an analysis of soil texture and color classification and identification of the wetland indicator status of plants (to the extent possible). Indicators of hydrology include soil saturation or presence of surface water, drift deposits, and other indicators. The delineation encompassed all potential wetlands and other waters within the study area. The survey included both the south side of I-580 and the median. Two potential wetlands (W1 and W2) were identified at the bottom of the south side slope of eastbound Interstate 580, see below graphic that shows the study area and the two wetlands identified. One drainage feature was identified as draining into Mountain House Creek.

Environmental Consequences

Threatened and Endangered Species impacts include:

California red-legged frog (*Rana draytonii*) – Federal Threatened, State Species of Special Concern. Temporary impacts to habitat include disturbance due to clearing and equipment access and staging, whereas permanent impacts include loss of dispersal and migration habitat (although migration habitat is very poor within the project footprint) associated with roadway widening and retaining wall construction. This loss of dispersal habitat could constitute a disturbance and result in a "take" (death of a frog) if California red-legged frogs are present. No direct or indirect impacts to breeding habitat are anticipated. If California red-legged frogs are present in the action area during construction, "take" (death of a frog) may occur in the form of harm, harassment, injury, and mortality associated with construction activities. The project would result in the temporary loss of 1.37 acre and permanent loss of 0.13 acre of California red-legged frog dispersal and upland habitat, consisting primarily of nonnative grassland. Temporary impacts include disturbance associated with clearing and equipment staging areas. Permanent impacts include habitat loss due to roadway widening and retaining wall construction.

California tiger salamander (*Ambystoma californiense*) – Federal Threatened, State Candidate Endangered. Temporary impacts to dispersal/aestivation habitat for California tiger salamander ("the salamander") include disturbance due to clearing and equipment access and staging, whereas permanent impacts include loss of dispersal and migration habitat (although migration habitat is very poor within the project footprint) associated with roadway widening and soil nail wall construction. This loss of dispersal habitat could constitute a disturbance and result in a "take" (death of a salamander) if the salamander are present. No direct or indirect impacts to salamander breeding habitat are anticipated. The project would result in approximately 1.37 acre of temporary and 0.13 acre of permanent impacts to the potential upland habitat. Breeding habitat does not occur within the study area and would not be affected by the project. Temporary impacts include disturbance and trampling due to clearing and equipment access, noise, vibrations, and permanent impacts include habitat loss of upland habitat associated with roadway widening and soil nail wall construction.

San Joaquin kit fox (*Vulpes macrotis mutica*) – Federal Endangered, State Threatened. Temporary impacts to dispersal/foraging habitat includes disturbance due to clearing and equipment access and staging. Although migration habitat is very poor within the project footprint, permanent impacts include loss of dispersal and migration habitat associated with roadway widening and soil nail wall construction. This loss of dispersal habitat could constitute a disturbance and result in a "take" (death) if San Joaquin kit fox are present. The permanent and temporary loss of habitat would not likely result in "take" (death) of the species due to existing diminished habitat values within the action area; the potentially suitable habitat is not ideal due to its proximity to a heavily traveled highway and noise/light impacts. It is very unlikely for San Joaquin kit fox to successfully disperse across Interstate 580 given the number of lanes and high level of vehicular traffic.

Large flowered fiddleneck (*Amsinkia grandiflora*) – Federal Endangered, State Endangered, CNPS 1B.1 Due to the limited area of the project scope, no direct or indirect impacts to the large-flowered fiddlenecks are currently anticipated.

Special-Status and Locally Rare Species that could be present in the study area include:

American badger (*Taxidea taxus*) – California Species of Special Concern. Impacts to this species include both temporary and permanent impacts to foraging habitat. American badger may also be indirectly affected by noise, light, and visual disturbance; however, since the project area is already highly disturbed due to roadway traffic, these impacts are expected to be negligible.

Loggerhead shrike (*Lanius ludovicianus*) – California Species of Special Concern. Implementation of the project would not result in the removal of nesting habitat. However, implementation of the project may result in the removal of marginal suitable foraging and dispersal habitat. This habitat is considered marginal given its proximity to Interstate 580 and human disturbed areas. The removal of the marginal habitat is not expected to have

any adverse affect on this species. No direct impacts to this species are anticipated. Additionally, the implementation of the various avoidance and minimization measures would further lessen the degree and potential impacts to this species.

Tricolored blackbird (*Agelaius tricolor*) – California Species of Special Concern The project may result in the removal of marginal suitable foraging, nesting, and dispersal habitat. This habitat is considered marginal given its proximity to Interstate 580 and human disturbed areas. The removal of the marginal foraging habitat is not expected to have any adverse affect on this species. Avoidance and minimization measures would further ensure that this species is not affected by the project.

Jurisdicitonal Wetland Delineation

No permanent impacts are anticipated to wetlands or waters of the U.S.

The drainage feature identified as draining into Mountain House Creek would be temporarily impacted. Temporary Impact would include: 0.0012 acres of U.S. Army Corps of Engineers Other Waters/ California Department of Fish and Wildlife (their jurisdictions overlap).

Consultation/Permits

Consultation will be initiated through the submittal of: the Biological Assessment to U.S. Fish & Wildlife Service (Sacramento Office) with the request for a Biological Opinion (permit); the Jurisdictional Delineation to U.S. Army Corps of Engineers (San Francisco Office) requesting a Nationwide 404 permit; the 1602 Agreement application to California Department of Fish and Wildlife (Bay–Delta Region Office); and the 401 permit application to the Regional Water Quality Control Board. See Appendix B for more information.

Avoidance, Minimization and Mitigation

Mitigation

California red-legged frog (*Rana draytonii*) – Federal Threatened, State Species of Special Concern. In accordance with the Federal Endangered Species Act (FESA), Caltrans proposes to mitigate for habitat impacted by the project. The 0.13 acre of permanent impacts to California red-legged frog

habitat would be mitigated at an offsite mitigation source at a 3:1 ratio. The total mitigation for permanent impacts at a 3:1 ratio is 0.39 acres.

California tiger salamander (*Ambystoma californiense*) – Federal Threatened, State Candidate Endangered. In accordance with the Federal Endangered Species Act and the California Endangered Species Act, Caltrans proposes to mitigate for California tiger salamander habitat impacted by the project. The 0.13 acre of permanent impacts to salamander habitat would be mitigated at an offsite mitigation source at a 3:1 ratio. The total mitigation for permanent impacts at a 3:1 ratio is 0.39 acres. Temporary impacts to habitat would be mitigated at a 1.1:1 ratio. A 1:1 ratio would be restored onsite and the remaining would be purchased at an offsite mitigation source. Caltrans would purchase single or multiple species acreage from an agency approved mitigation source

Avoidance and Minimization:

California red-legged frog (*Rana draytonii*) – Federal Threatened, State Species of Special Concern.

Due to the proximity of habitat and documented occurrences of the California red-legged frog in the vicinity, Caltrans would implement, the following specific measures to avoid or minimize potential impacts to listed amphibian species (including California red-legged frog):

- Preconstruction Surveys: A U.S. Fish & Wildlife Service (USFWS) approved biologist would conduct a preconstruction survey within the biological study area 14 days prior to the start of construction activities. Preconstruction surveys would be conducted in areas where ground disturbing activities would occur some of which include vegetation clearing, grubbing, or slope excavation. If California red-legged frog(s) are observed the biologist would notify the U.S. Fish & Wildlife Service (USFWS) to determine the appropriateness of relocating the species. If the agencies approve relocation, a USFWS biologist would be allowed sufficient time to move the species from the work site before work activities begin. Only U.S. Fish & Wildlife Service (USFWS) approved biologists would participate in activities associated with the capture, handling, and monitoring of the California red-legged frogs.

- Construction Area Delineation: Prior to any ground disturbance within the biological study area the boundaries of the disturbance area would be clearly delineated with orange-colored plastic high-visibility construction fencing (Environmentally Sensitive Area fencing) or solid barriers to prevent workers or equipment from inadvertently straying from the project footprint.

- Wildlife Exclusion Fencing: Exclusion fencing would be erected along the edge of the project footprint area before project activities begin, including staging equipment and supplies. Fencing would be a minimum of 3 feet high and buried in the soil or from a tight seal with the pavement to prevent listed amphibian species from crawling under and entering the project area.

- Procedure for Listed Species Discovery Onsite: If a listed amphibian species, or that construction personnel believes may be listed species, is encountered during project construction, or if any contractor, employee, or agency personnel inadvertently kills or injures a listed amphibian, the following protocol would be followed:

  a. All work that could result in direct injury, disturbance, or harassment of the individual animal would immediately cease.

  b. The Resident Engineer would be immediately notified.

  c. The Resident Engineer would notify the approved onsite biologist.

  d. The listed species would be captured and immediately transported in a cool, moist container to a suitable location outside the project area (e.g. suitable habitat adjacent to but outside of the project footprint area). The relocation site would be determined in advance by a U.S. Fish & Wildlife Service (USFWS) approved biologist in consultation with the USFWS (and California Department of Fish & Wildlife if appropriate). The relocated individual(s) would be monitored until it is determined that the animal(s) are not imperiled by predators or other dangers.

  e. The onsite biologist would notify the U.S. Fish & Wildlife Service (USFWS) within 24 hours after listed species have been relocated.

  f. If a listed species had been killed or injured, the biologist would contact U.S. Fish & Wildlife Service (USFWS) within 24 hours.

- Entrapment Avoidance: To prevent inadvertent entrapment of listed amphibian or mammal species during construction, all excavated, steep-walled holes or trenches more than 2 feet deep would be covered with plywood or similar material at the end of each working day, or the holes or trenches would contain one or more escape ramps constructed of earth fill or wooden planks. Before such holes, or trenches are filled, they would be thoroughly inspected for trapped animals. If, at any time, a trapped listed species (or other wildlife) is discovered, U.S. Fish & Wildlife Service (USFWS) would be contacted.

- Prohibition of erosion control material potentially harmful to California red-legged frog: Plastic monofilament netting (erosion control matting) or similar material would not be used at the project site because listed amphibian species may become entangled and trapped in it. Tightly woven fiber netting or similar material would be used for erosion control or other purposes.

- Prevention of introduction of amphibian diseases: Biologists would take all precautions to prevent spread of amphibian diseases when handling listed species. All equipment and clothing would be disinfected per protocol standards.

Weekly Site Inspections: The Biological Monitor would conduct weekly surveys within the work area and along its boundaries to assess the ESA fencing and exclusion fencing are installed and functioning properly. Should these fences be damaged in a way that may allow impacts to this species, the Resident Engineer would be immediately notified and repairs would be made.

California tiger salamander (*Ambystoma californiense*) – Federal Threatened, State Candidate Endangered. Due to the potential for presence of the California tiger salamander (CTS) a State Threatened Species within upland habitats, avoidance and minimization measures outlined for California red-legged frog would also be implemented to avoid and/or minimize impacts on this species. The following additional measures would be implemented by Caltrans to further avoid or minimize impacts of the project on the California tiger salamander:

- Preconstruction survey and relocation**:** A U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlif (CDFW)e approved Biologist would conduct a preconstruction survey of the work site 14 days prior to the start of work construction activities, including vegetation clearing, grubbing, or other ground disturbance activities. If California tiger salamander adults or juveniles are found within the project footprint, all

work that could result in direct injury, disturbance, or harassment of the individual animal would immediately cease and can resume once there is no potential for the species to be affected. The biological monitor should contact the U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW) to determine whether relocating the species is appropriate. If the agencies approve of relocation, a USFWS-permitted biologist should be allowed sufficient time to move the species from the work site before work activities begin. Only U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW) approved Biologists may participate in activities associated with the capture, handling, and monitoring of California tiger salamander.

- Biological monitoring during construction**:** A biological monitor would be onsite during ground disturbing activities to inspect for California tiger salamander. that may be unearthed. Should a California tiger salamander be identified, construction would be halted, U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife would be contacted, and with approval the individual would be relocated by a permitted biologist before construction is restarted.

San Joaquin kit fox (*Vulpes macrotis mutica*) – Federal Endangered, State Threatened. Although San Joaquin kit fox would not likely be present or impacted by the proposed project, the following avoidance and minimization measures would be implemented to avoid any potential for impacts (same apply to and American Badger):

If any animal that construction personnel believe may be a San Joaquin kit fox, is encountered during project construction, or if any contractor, employee, or agency personnel inadvertently kills or injures a San Joaquin kit fox, the following protocol shall be observed:

- All work that could result in direct injury, disturbance, or harassment of the individual animal would immediately cease and may resume when there is no threat to San Joaquin kit fox individuals.
- The resident engineer would be immediately notify the approved onsite biologist.
- The animal would be allowed to leave the site voluntarily. The biologist would contact the U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW) within 24 hours.

- If a San Joaquin kit fox has been killed or injured, the U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW) approved Biologist would contact both agencies within 24 hours. Caltrans would implement the following additional measures to avoid entrapment within construction-related culverts or pipes:
- Entrapment avoidance: To prevent inadvertent entrapment of San Joaquin kit fox or other animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep would be covered with plywood or similar materials at the end of each working day. Holes or trenches would have one or more escape ramps constructed of earthfill or wooden planks. Before such holes or trenches are filled, they would be thoroughly inspected by a USFWS approved biologist for trapped animals. If, at any time, a trapped San Joaquin kit fox (or other wildlife) is discovered, U.S. Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW) would be contacted for guidance. USFWS shall be notified within 1 working day by telephone or email.
- Capping/Inspection of culvert/pipes: Because San Joaquin kit fox are attracted to den-like structures, such as culverts and pipes, and may enter stored culverts or pipes and become trapped, all culverts, pipes, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods would be either securely capped prior to storage or thoroughly inspected by a USFWS approved biologist for San Joaquin kit fox before the pipe is buried, capped, or otherwise used or moved in any way. Any San Joaquin kit fox found in a pipe or culvert shall be allowed to escape unimpeded.

Jurisdicitonal Wetland Delineation

Due to the implementation of avoidance and minimization measures, no indirect impacts to waters outside of the project footprint are anticipated, therefore, no mitigation is proposed for these features. Caltrans would implement avoidance and minimization measures for temporary impacts to wetlands and Waters of the U.S., therefore no compensatory off-site mitigation would be required.

VIII. HAZARDS AND HAZARDOUS MATERIALS: a)

Affected Environment

A database search did not reveal the presence of known hazardous waste sites within one-quarter mile of the project limits; and there is no right-of-way acquisition. Since the project will not alter any bridges and is not located within the area where naturally occurring asbestos (NOA) is likely to be found, an asbestos survey is not needed.

Lead-based paint may be present in yellow traffic striping and pavement-marking materials along the highway within the project limits. These hazardous materials were eliminated from Caltrans roadway construction in 1989.

Aerially deposited lead created by the exhaust of cars burning unleaded gasoline is common near freeways and highways. Due to the vehicular activity on Interstate 580 since 1970s, the adjacent soil is likely to contain elevated lead concentrations. This project will involved roadway excavation in areas where aerially deposited lead (ADL) is likely to be present due to historic vehicle emissions. There was a site investigation conducted in 2010 for another Caltrans' project (eastbound I-580 truck climbing lane project, Ala-580, PM R4.7-R8.2, EA 04-4A07U4) in close vicinity of this project footprint, where contaminated soil was found.

Environmental Consequences

Lead-based paint in good condition does not present an immediate health risk; however, lead particles could be emitted to the air during pavement renovation activities.

Construction activities will disturb soil with potentially elevated lead levels in excess of the hazardous waste threshold, requiring one or both of the following: either disposal at a Class I landfill or re-use of contaminated soils on-site abiding by the Department of Toxic Substance Control determined special provisions.

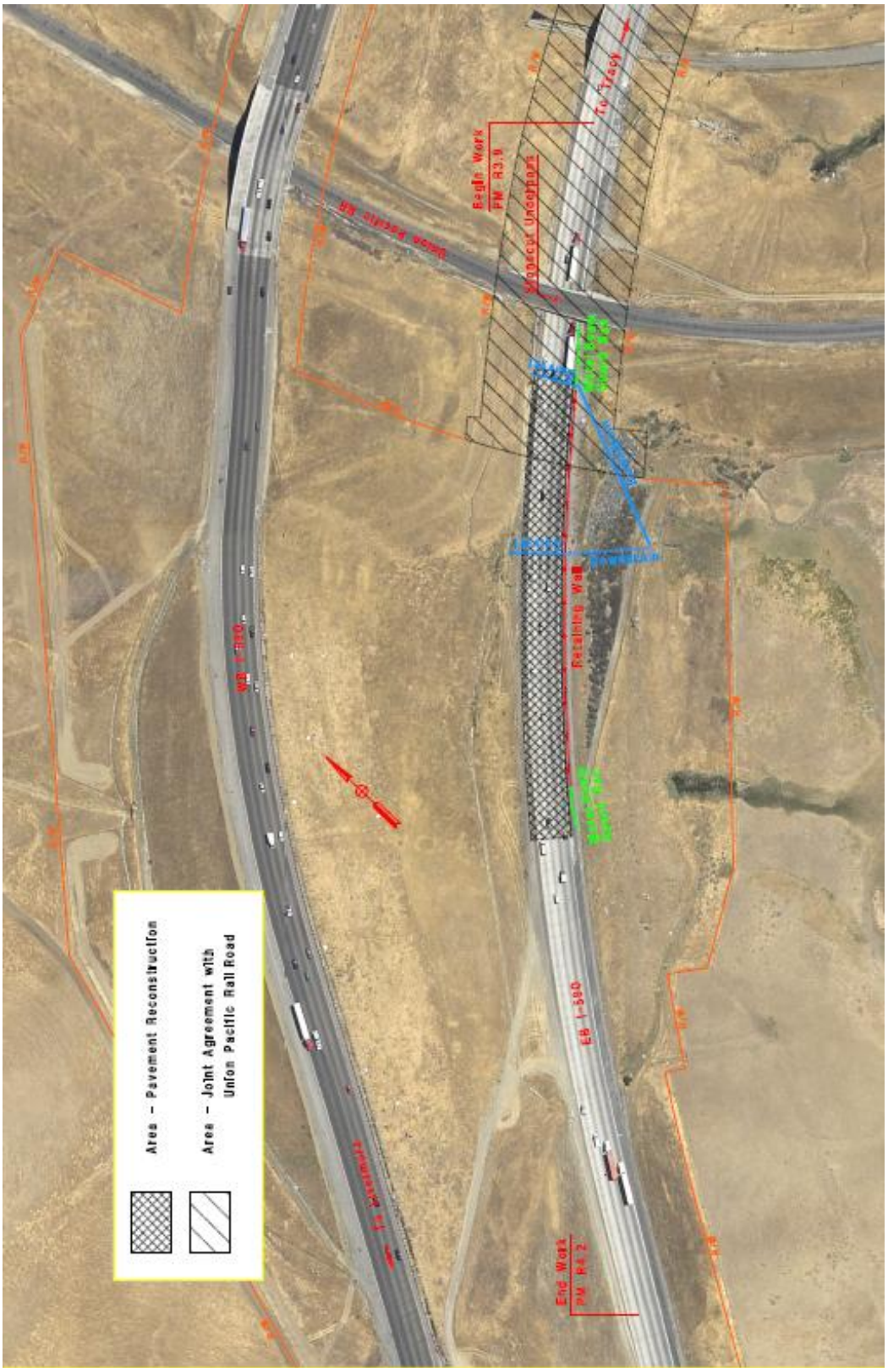
Since the scopes and site settings of the truck climbing lane project and this project are very similar, it could be that a new subsurface investigation exclusively for this project will not be necessary and the data collected from the 2010 site investigation are suitable to be used in this project to assess different soil management options.

The Department of Toxic Substances Control (DTSC) issued Caltrans a variance, which allows Caltrans to manage lead-contaminated soil within its right-of-way.

Protective measures to reduce or eliminate hazardous waste-related impacts include:

- Construction contractor(s) would be required to prepare a Lead Compliance Plan to be approved by Caltrans before construction activities because lead was found to be present in the soil
- Soil to be disturbed by the project has been tested, and testing to date has determined that lead from automobile emissions is present in the soil along the highway. Any excavated soil would be handled and disposed of in accordance with all applicable laws and regulations. Language will be included in the construction contract to ensure that this material is managed appropriately, requiring one or both of the following: disposal at either a Class I landfill or re-use of contaminated soils on-site abiding by the Department of Toxic Substance Control determined special provisions

Appendix A Project Map



Appendix B Permits, Reviews, Approvals

Agency	Permit/Approval (FEDERAL & STATE & LOCAL)	Status
U.S. Fish and Wildlife Service (Sacramento Office)	Endangered Species Act Section 7 Consultation for federally-listed Threatened and Endangered Species – Biological Opinion from U.S. Fish and Wildlife Service	A Biological Assessment evaluating the project's potential effects to California red-legged frog and California tiger salamander will be submitted to the U.S. Fish and Wildlife Service, and a Biological Opinion is expected before the final environmental document is signed
California Department of Fish and Wildlife (Bay–Delta Region 3 Office)	Fish and Game Code Section 1602 Streambed Alteration Agreement	Temporary impacts to drainage features will require a 1602 Streambed Alteration Agreement. The application will be submitted during final design, and the permit obtained prior to the project going out for bidding on the construction contract.
	2081 Agreement	Impacts to California tiger salamander habitat and the potential to "take" or kill a salamander during construction require a Incidental Take Permit. The application will be submitted during final design, and the permit obtained prior to the project going out for bidding on the construction contract.
United States Army Corps of Engineers (San Francisco Office)	Clean Water Act Section 404 Nationwide Permit for filling or dredging waters of the U.S.	Temporary impacts to drainage features will require a Nationwide 404 permit. The application will be submitted during final design, and the permit obtained prior to the project going out for bidding on the construction contract.
Union Pacific Railroad	Contractor Occupancy/Access	Under existing joint agreement (1937) notify Union Pacific Railroad of intent for Contractor Occupancy/Access To be submitted after approval of the final environmental document
Regional Water Quality Control Board Region 5	Clean Water Act Section 402—National Pollutant Discharge Elimination System: Waste Discharge Permit A Storm Water Pollution Prevention Plan required by the Caltrans will be prepared and is expected to provide all the necessary temporary pollution and erosion control measures required during construction	Compliance with (1) the Statewide National Pollutant Discharge Elimination System Permit (Order No. 99-06-DWQ NPDES No. CAS000003) and (2) the General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (Order No. 99-08-DWQ, NPDES No. CAS000002)
	Clean Water Act Section 401 Water Quality Certification	Temporary impacts to drainage features will require a 401 permit. The application will be submitted during final design, and the permit obtained prior to the project going out for bidding on the construction contract.

Appendix C Climate Change

CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change by the United Nations and World Meteorological Organization in 1988, has led to increased efforts devoted to greenhouse gas emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of greenhouse gasses generated by human activity including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of greenhouse gas emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light duty trucks, other trucks, buses, and motorcycles make up the largest source (second to electricity generation) of greenhouse gas emitting sources. The dominant greenhouse gas emitted is CO_2, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing greenhouse gas emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)[1].

There are four primary strategies for reducing greenhouse gas emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing growth of vehicle miles traveled, 3) transitioning to lower greenhouse gas emitting fuels, and 4) improving vehicle technologies. To be most effective all four strategies should be pursued collectively. The following Regulatory Setting section outlines state and federal efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change.

[1] http://climatechange.transportation.org/ghg_mitigation/

Assembly Bill 1493 (AB 1493), Pavley. Vehicular Emissions: Greenhouse Gases, 2002: requires the California Air Resources Board to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year. In June 2009, the U.S. Environmental Protection Agency administrator granted a Clean Air Act waiver of preemption to California. This waiver allowed California to implement its own greenhouse gas emission standards for motor vehicles beginning with model year 2009. California agencies will be working with federal agencies to conduct joint rulemaking to reduce greenhouse gas emissions for passenger cars model years 2017-2025.

Executive Order (EO) S-3-05: (signed on June 1, 2005, by former Governor Arnold Schwarzenegger) the goal of this EO is to reduce California's greenhouse gas emissions to: 1) year 2000 levels by 2010, 2) year 1990 levels by the 2020, and 3) 80 percent below the year 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

AB 32, the Global Warming Solutions Act of 2006, Núñez and Pavley: AB 32 sets the same overall greenhouse gas emissions reduction goals as outlined in EO S-3-05, while further mandating that Air Resources Board create a scoping plan, (which includes market mechanisms) and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases."

Executive Order S-20-06: (signed on October 18, 2006 by former Governor Arnold Schwarzenegger) further directs state agencies to begin implementing AB 32, including the recommendations made by the California's Climate Action Team.

Executive Order S-01-07: (signed on January 18, 2007 by former Governor Arnold Schwarzenegger) set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least ten percent by the year 2020.

Senate Bill 97 (SB 97) Chapter 185, 2007: required the Governor's Office of Planning and Research to develop recommended amendments to the California Environmental Quality Act Guidelines for addressing greenhouse gas emissions. The amendments became effective on March 18, 2010.

Caltrans Director's Policy 30 (DP-30) Climate Change (approved June 22, 2012): is intended to establish a Caltrans policy that will ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. This policy contributes to the Caltrans stewardship goal to preserve and enhance California's resources and assets.

Federal

Although climate change and greenhouse gas reduction is a concern at the federal level; currently there are no regulations or legislation that have been enacted specifically addressing greenhouse gas emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency nor the Federal Highway Administration has

promulgated explicit guidance or methodology to conduct project-level greenhouse gas analysis. As stated on Federal Highway Administration's climate change website (http://www.fhwa.dot.gov/hep/climate/index.htm), climate change considerations should be integrated throughout the transportation decision-making process–from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will facilitate decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project level decision-making. Climate change considerations can easily be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies set forth by Federal Highway Administration to lessen climate change impacts do correlate with efforts that the state has undertaken and is undertaking to deal with transportation and climate change; the strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in the growth of vehicle hours travelled.

Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the "National Clean Car Program" and EO 13514 - *Federal Leadership in Environmental, Energy and Economic Performance*.

Executive Order 13514 is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also direct federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

On April 2, 2007, in *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act and that the U.S. Environmental Protection Agency has the authority to regulate greenhouse gas The Court held that the U.S. Environmental Protection Agency Administrator must determine whether or not emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the U.S. Environmental Protection Agency Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator found that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations.

- **Cause or Contribute Finding:** The Administrator found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the U.S. Environmental Protection Agency's *Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles*, which was published on September 15, 2009[2]. On May 7, 2010 the final *Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards* was published in the Federal Register.

U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced greenhouse gas emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever greenhouse gas regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle greenhouse gas regulations. These steps were outlined by President Obama in a Presidential Memorandum on May 21, 2010.[3]

The final combined U.S. Environmental Protection Agency and National Highway Traffic Safety Administration standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide (CO_2) per mile, (the equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards will cut greenhouse gas emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On November 16, 2011, U.S. Environmental Protection Agency and National Highway Traffic Safety Administration issued their joint proposal to extend this national program of coordinated greenhouse gas and fuel economy standards to model years 2017 through 2025 passenger vehicles.

Project Analysis

An individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of greenhouse gas.[4] In

[2] http://www.epa.gov/oms/climate/regulations.htm#1-1

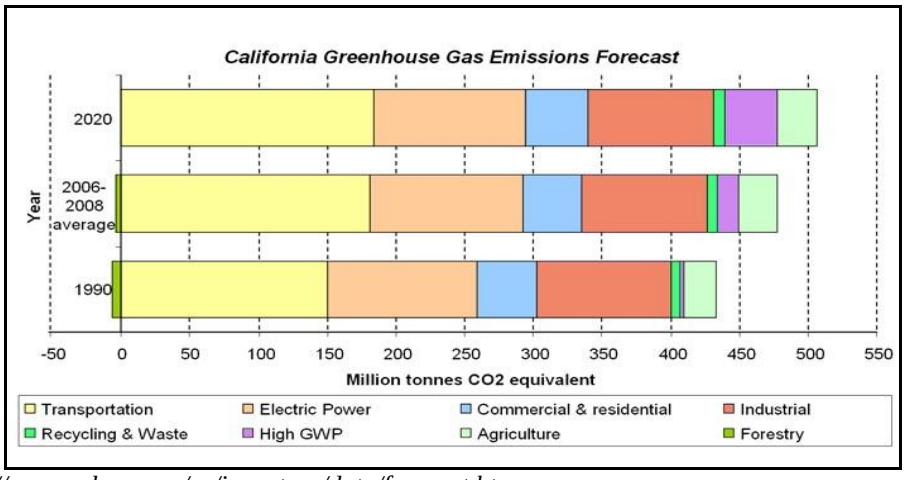
[3] http://epa.gov/otaq/climate/regulations.htm

[4] This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (March 5,

assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce greenhouse gas emissions. As part of its supporting documentation for the Draft Scoping Plan, Air Resources Board released the greenhouse gas inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the greenhouse gas inventory for 2006, 2007, and 2008.

CALIFORNIA GREENHOUSE GAS FORECAST



Source: http://www.arb.ca.gov/cc/inventory/data/forecast.htm

The Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing greenhouse gas emission reduction and climate change. Recognizing that 98 percent of California's greenhouse gas emissions are from the burning of fossil fuels and 40 percent of all human made greenhouse gas emissions are from transportation, the Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.[5]

The purpose of the proposed project is to repair damage and deficiencies which include: erosion of the hillside supporting the eastbound lanes and outside shoulder; broken roadway

2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

[5] Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

slabs; and to repair the underground drainage system. The scope of work consists of construction a retaining wall, repairing/modifying the drainage system, and rehabilitating the roadway surface. There will be no change to the existing lane configuration or capacity of the highway. Since the project will not increase capacity or vehicle hours travelled, no increases in operational GHG emissions are anticipated.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction greenhouse gas emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

CEQA Conclusion

While construction will result in a slight increase in greenhouse gas emissions during construction, Caltrans expects that there would be no operational increase in GHG emissions associated with this proposed project. However, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and California Environmental Quality Act significance, it is too speculative to make a determination on the project's direct impact and its contribution on the cumulative scale to climate change. Nonetheless, Caltrans is taking further measures to help reduce energy consumption and greenhouse gas emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

AB 32 Compliance

The Caltrans continues to be actively involved on the Governor's Climate Action Team as Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies the Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Former Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a $222 billion infrastructure improvement program to fortify the state's transportation system,

education, housing, and waterways, including $100.7 billion in transportation funding during the next decade. The Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in greenhouse gas emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together are expected to reduce congestion. The Strategic Growth Plan relies on a complete systems approach to attain CO_2 reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as depicted in Figure 1: The Mobility Pyramid.

Figure 1: Mobility Pyramid

The Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. The Caltrans works closely with local jurisdictions on planning activities but does not have local land use planning authority. The Caltrans assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; the Caltrans is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by U.S. Environmental Protection Agency and Air Resources Board.

Table 1 summarizes the Caltrans and statewide efforts that the Caltrans is implementing in order to reduce greenhouse gas emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

Table 1 Climate Change/CO_2 Reduction Strategies						
Strategy	**Program**	**Partnership**		**Method/Process**	Estimated CO_2 Savings (MMT)	
		Lead	**Agency**		2010	2020
Smart Land Use	Intergovernmental Review	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.07	2.17
Mainstream Energy & Greenhouse Gas into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	InterCaltrans effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	InterCaltrans, CA Environmental Protection Agency, Air Resources Board, California Energy Commission		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Caltrans of General Services		Fleet Replacement B20 B100	.0045	.0065 .045 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	4.2 3.6
Goods Movement	Office of Goods Movement	CA Environmental Protection Agency, Air Resources Board, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

Adaptation Strategies

"Adaptation strategies" refer to how the Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the White House Council on Environmental Quality (CEQ), the Office of Science and Technology Policy, and the National Oceanic and Atmospheric Administration, released its interagency report on October 14, 2010 outlining recommendations to President Obama for how Federal Agency policies and programs can better prepare the U.S. to respond to the impacts of climate change. The Progress Report of the Interagency Climate Change Adaptation Task Force recommends that the federal government implement actions to expand and strengthen the nation's capacity to better understand, prepare for, and respond to climate change.

Climate change adaption must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, former Governor Arnold Schwarzenegger signed EO S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

The California Natural California Natural Resources Agency was directed to coordinate with local, regional, state and federal public and private entities to develop. The California Climate Adaptation Strategy (Dec 2009)[6], which summarizes the best known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08 that specifically asked the California Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Caltrans of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat;

[6] http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF

Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings.

The California Natural Resources Agency was also directed to request the National Academy of Science to prepare a Sea Level Rise Assessment Report by December 2010[7] to advise how California should plan for future sea level rise. The report is to include:

- Relative sea level rise projections for California, Oregon and Washington taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- The range of uncertainty in selected sea level rise projections.
- A synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- A discussion of future research needs regarding sea level rise.

Prior to the release of the final Sea Level Rise Assessment Report, all state agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data

Interim guidance has been released by The Coastal Ocean Climate Action Team as well as the Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise.

All projects that have filed a Notice of Preparation as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of the state. The Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

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[7] Pre-publication copies of the report, *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*, were made available from the National Academies Press on June 22, 2012. For more information, please see http://www.nap.edu/catalog.php?record_id=13389.

Currently, the Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, the Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Caltrans will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. The Caltrans is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

Appendix D List of Technical Studies/Materials Available

Project Area Map

Typical Cross Section

Project Area Photos (Early 2013)

Need for the Project & Construction Data

Air Quality Analysis and Noise Analysis (March 2012)

Water Quality Study (April 2013)

Natural Environment Study (June 2013)

Storm Water Data Report (June 2013)

Hazardous Waste Review (March 2012)

Scenic Resource Evaluation/Visual Assessment (June 2013)

Preliminary Foundation Report (August 2012)

Paleontological Identification Report (April 2013)

The following technical studies have been removed due to confidentiality:

Historical Property Survey Report/ Archaeological Survey Report (Nov.2012)

The legal authority to restrict cultural resource information can be found in California Government Code sections 6254.10 and 6254(r); California Code of Regulations Section 15120(d); and Section 304 of the National Historic Preservation Act of 1966.